

Fig. 1A

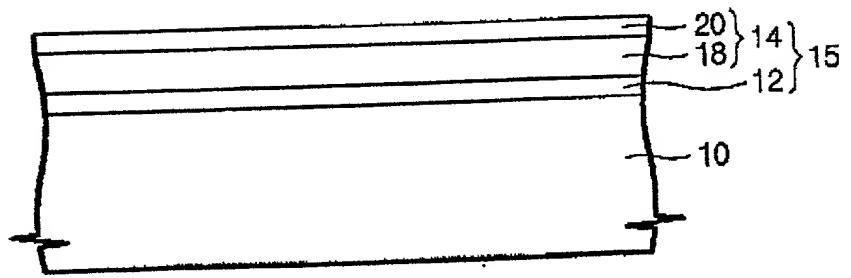


Fig. 1B

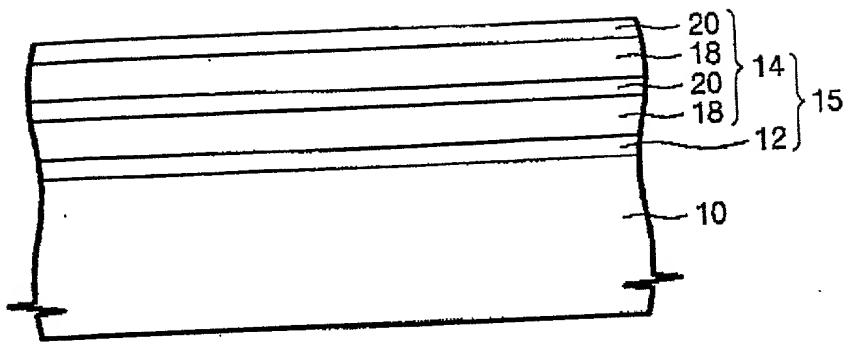


Fig. 1C

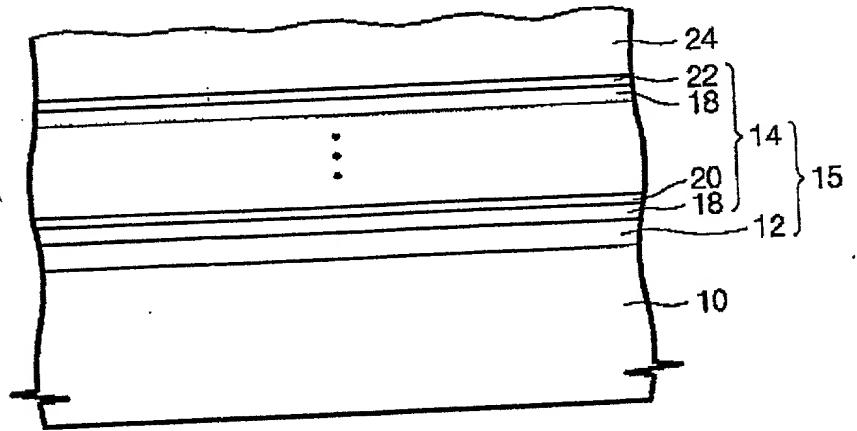
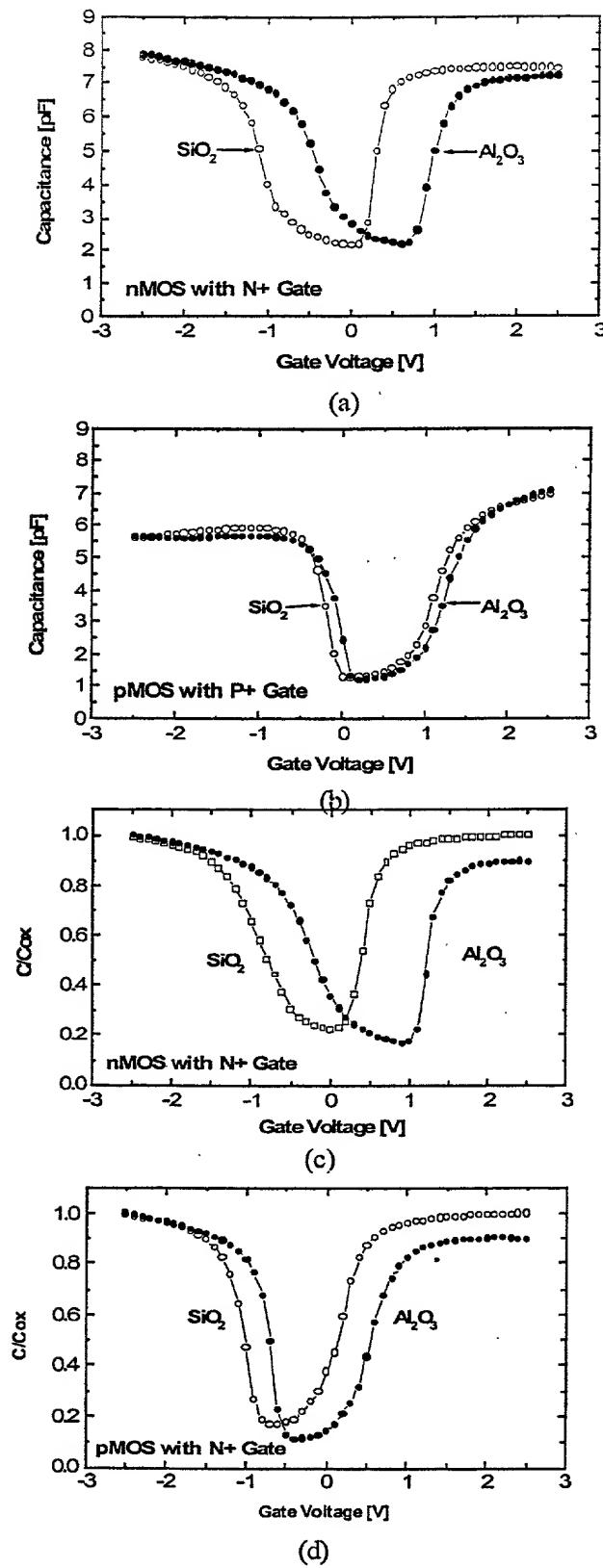


Fig. 2

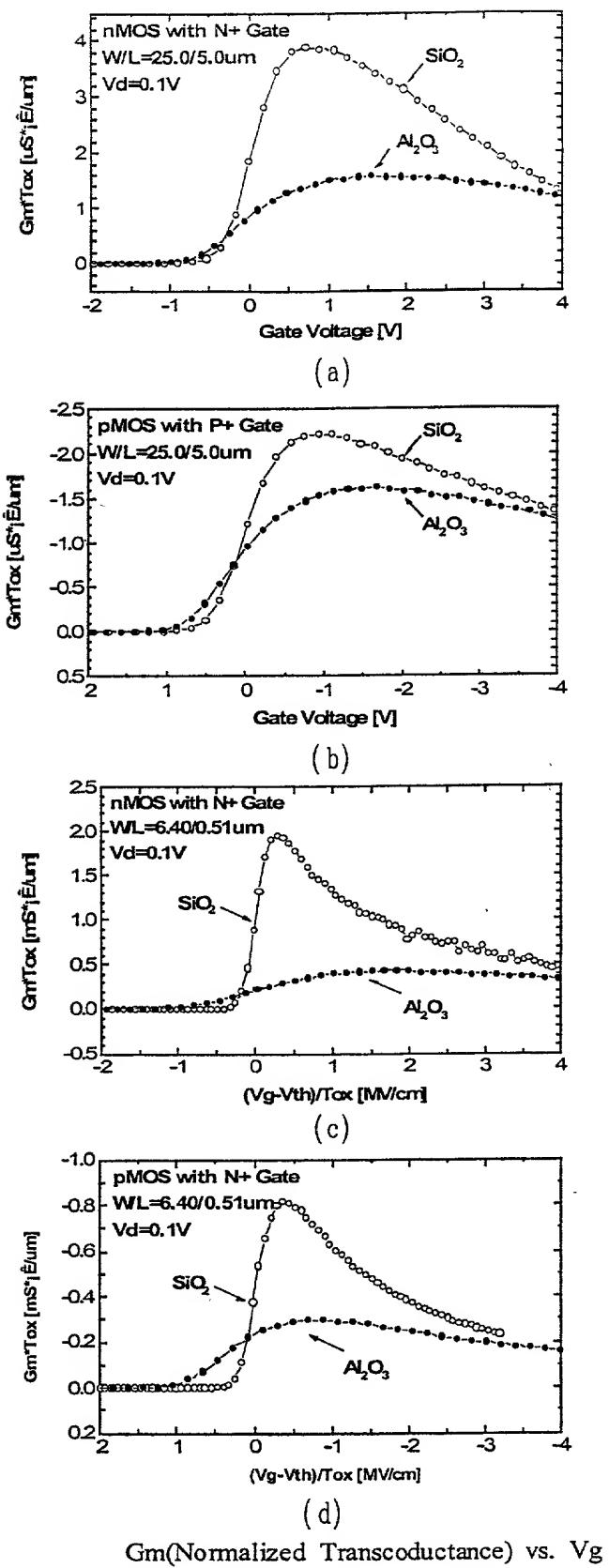
FIG. 3



Al₂O₃ MOS Capacitor C-V Curves

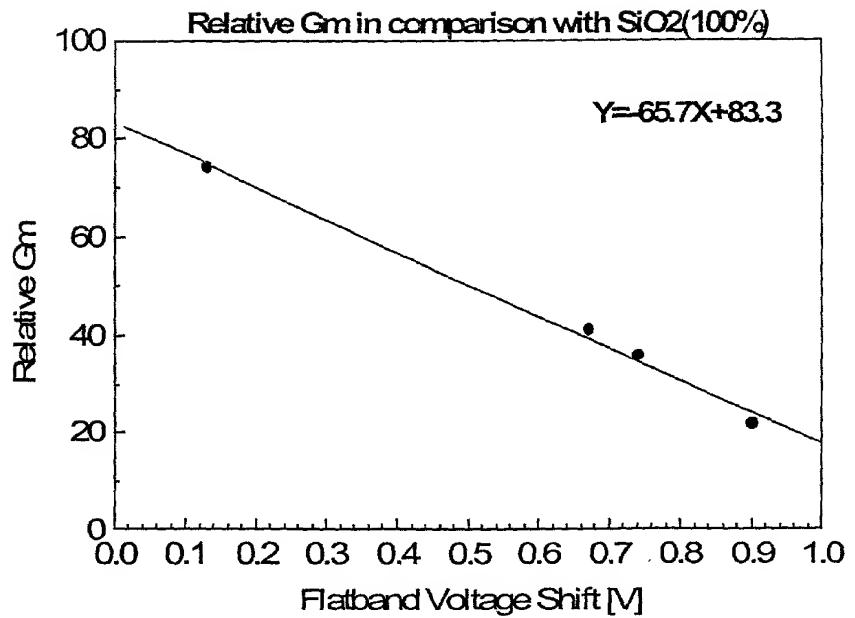
- (a) n+Poly-Si/ Al₂O₃ or SiO₂/ p-Si (b) p+Poly-Si/
Al₂O₃ or SiO₂/ n-Si (c) n+Poly-Si/ Al₂O₃ or
SiO₂/ p-Si (d) n+Poly-Si/ Al₂O₃ or SiO₂/ n-Si

FIG. 4



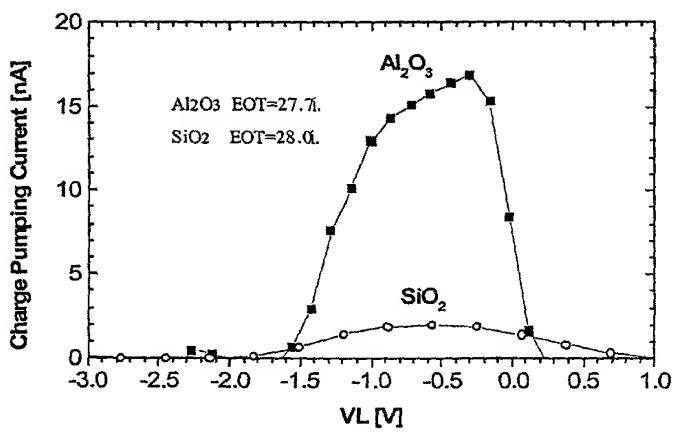
Gm(Normalized Transconductance) vs. Vg

- (a) N+Gate nMOS (b) P+Gate pMOS
- (c) In-situ Doped N+Gate nMOS
- (d) In-situ Doped N+Gate pMOS



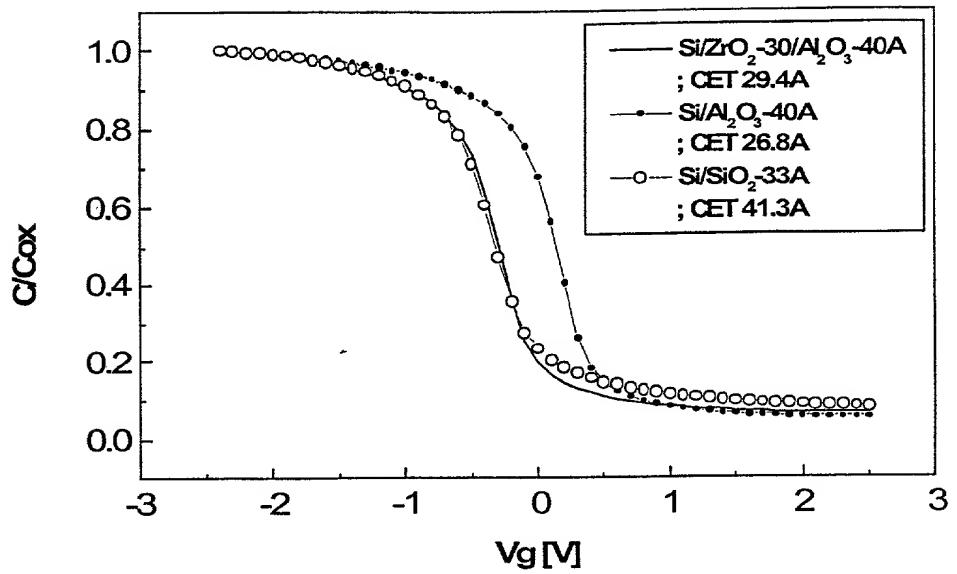
Flatband Voltage Shift vs. Relative Gm of Al₂O₃ to SiO₂

FIG. 5



Gate Base Level VL vs. Charge Pumping Current Icp

FIG. 6



C-V Curve of ZrO₂/Al₂O₃ Stack layer

FIG. 7